

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P390748

Luminaire Tested: **22CZ2-85VHE-HRP-UNV-L940-CD1-SWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P390748
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-85VHE-HRP-UNV-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6169.2 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

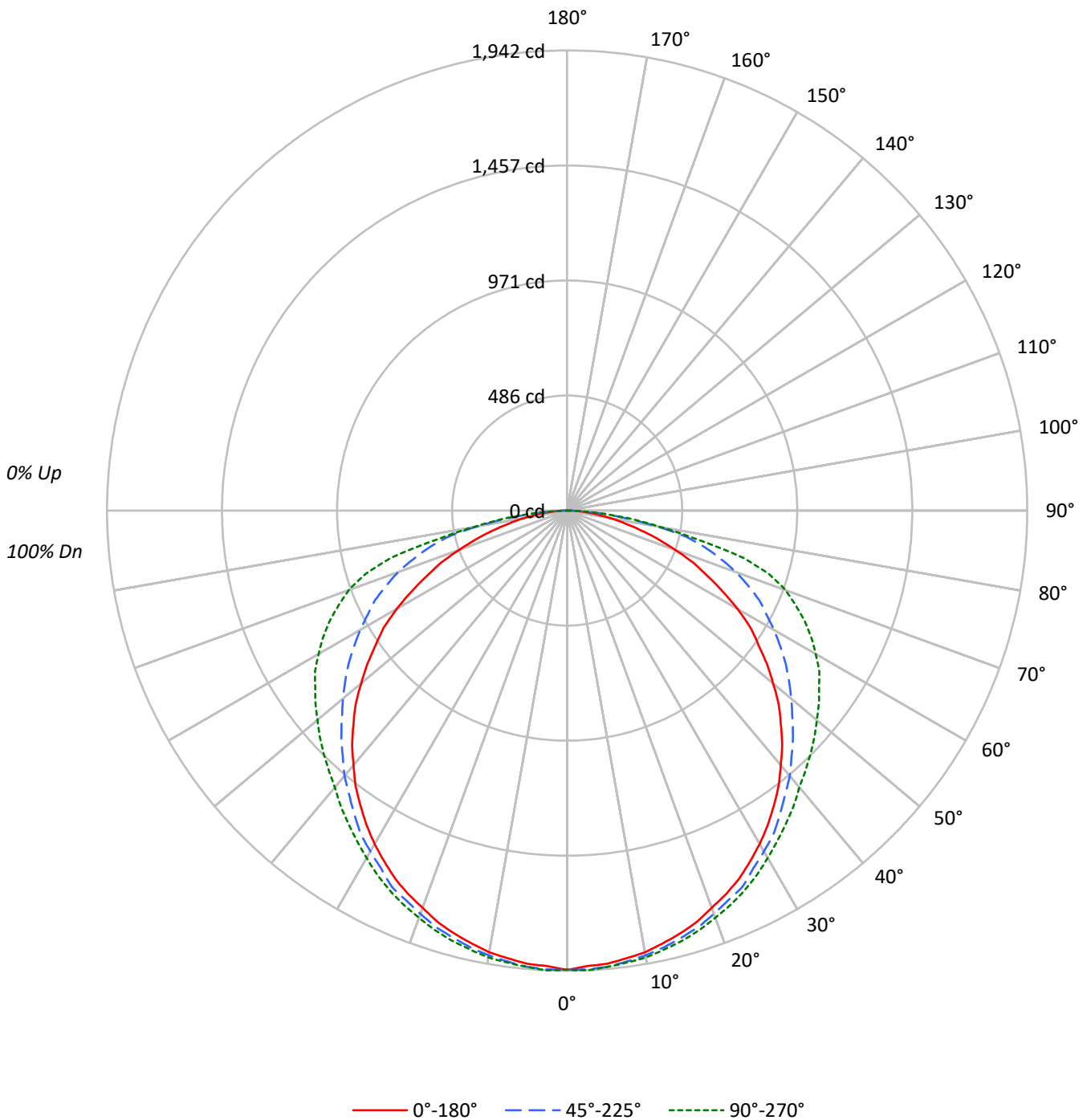
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390748

CATALOG NUMBER: 22CZ2-85VHE-HRP-UNV-L940-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390748

CATALOG NUMBER: 22CZ2-85VHE-HRP-UNV-L940-CD1-SWPD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5215	5215	5215
5°	5186	5222	5222
10°	5171	5208	5233
15°	5146	5196	5234
20°	5108	5186	5237
25°	5094	5201	5255
30°	5048	5161	5260
35°	4994	5143	5293
40°	4926	5133	5357
45°	4853	5130	5527
50°	4750	5168	5757
55°	4620	5280	6090
60°	4470	5422	6521
65°	4161	5692	7051
70°	3821	5963	7713
75°	3350	6276	7975
80°	2884	5979	6259
85°	2523	4344	4764



TEST NUMBER: P390748

CATALOG NUMBER: 22CZ2-85VHE-HRP-UNV-L940-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.3	3.0
10°-20°	526.3	8.5
20°-30°	803.0	13.0
30°-40°	980.5	15.9
40°-50°	1048.3	17.0
50°-60°	1011.9	16.4
60°-70°	871.0	14.1
70°-80°	589.3	9.6
80°-90°	155.5	2.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1512.6	24.5
0°-40°	2493.1	40.4
0°-60°	4553.3	73.8
0°-90°	6169.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6169.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1938	1938	1938	1938	1938	
5°	1920	1924	1933	1933	1933	182
15°	1847	1852	1865	1874	1879	521
25°	1716	1725	1752	1761	1770	790
35°	1520	1534	1566	1598	1611	951
45°	1275	1298	1348	1416	1452	984
55°	985	1017	1126	1239	1298	883
65°	654	717	894	1035	1107	650
75°	322	427	604	726	767	346
85°	82	114	141	145	154	92
90°	0	0	0	0	0	



TEST NUMBER: P390748

CATALOG NUMBER: 22CZ2-85VHE-HRP-UNV-L940-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1937.9	1937.9	1937.9	1937.9	1937.9
2.5°	1924.2	1928.8	1937.9	1937.9	1942.4
5°	1919.7	1924.2	1933.3	1933.3	1933.3
7.5°	1906.1	1910.6	1919.7	1924.2	1924.2
10°	1892.5	1897.0	1906.1	1910.6	1915.2
12.5°	1869.8	1874.3	1887.9	1897.0	1897.0
15°	1847.1	1851.6	1865.2	1874.3	1878.9
17.5°	1819.9	1828.9	1842.5	1851.6	1856.2
20°	1783.6	1792.6	1810.8	1824.4	1828.9
22.5°	1751.8	1760.9	1779.0	1792.6	1801.7
25°	1715.5	1724.6	1751.8	1760.9	1769.9
27.5°	1670.1	1679.2	1701.9	1720.0	1733.6
30°	1624.7	1633.8	1661.0	1683.7	1692.8
32.5°	1574.8	1588.4	1620.2	1638.3	1651.9
35°	1520.3	1533.9	1565.7	1597.5	1611.1
37.5°	1465.9	1479.5	1511.3	1552.1	1570.3
40°	1402.3	1420.5	1461.3	1515.8	1524.9
42.5°	1343.3	1366.0	1402.3	1465.9	1488.6
45°	1275.3	1298.0	1347.9	1415.9	1452.3
47.5°	1211.7	1234.4	1288.9	1370.6	1415.9
50°	1134.6	1166.3	1234.4	1329.7	1375.1
52.5°	1062.0	1089.2	1180.0	1284.3	1338.8
55°	984.8	1016.6	1125.5	1239.0	1298.0
57.5°	916.7	944.0	1066.5	1193.6	1261.6
60°	830.5	866.8	1007.5	1143.7	1211.7
62.5°	739.7	794.2	948.5	1089.2	1161.8
65°	653.5	717.1	894.0	1034.7	1107.3
67.5°	576.4	644.4	826.0	975.7	1043.8
70°	485.6	571.8	757.9	903.1	980.3
72.5°	403.9	499.2	680.7	826.0	894.0
75°	322.2	426.6	603.6	726.1	767.0
77.5°	249.6	349.4	517.4	553.7	558.2
80°	186.1	276.8	385.8	390.3	403.9
82.5°	127.1	195.1	249.6	272.3	276.8
85°	81.7	113.5	140.7	145.2	154.3
87.5°	36.3	40.8	49.9	45.4	45.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)